

Amendment to the Claims:

1. (Original) An MR device for MR imaging, which device includes:
 - a main field magnet for generating a steady main magnetic field;
 - a gradient coil system with a plurality of gradient coils for generating magnetic gradient fields;
 - 5 - an RF coil system for transmitting and/or receiving RF signals, which coil system includes at least two RF coil arrays which are integrated in one coil former and have been optimized for different applications, each RF coil array comprising at least two RF coils decoupled from one another;
 - a transmit/receive unit for driving the RF coil arrays and for
 - 10 receiving MR signals from the RF coil arrays, there being provided a plurality of channels, notably a number of channels which corresponds to the number of RF coils of the RF coil array comprising the largest number of RF coils;
 - a control unit for controlling the MR imaging, the control unit being arranged to switch over the RF coil arrays for temporally separate use of the
 - 15 individual RF coil arrays during the MR data acquisition; and
 - a processing unit for processing received MR signals.
2. (Previously Presented) An MR device as claimed in claim 1, wherein the at least two RF coil arrays are decoupled from one another.
3. (Currently Amended) An MR device ~~as claimed in claim 1,~~
wherein for MR imaging, which device includes:
 - a main field magnet for generating a steady main magnetic field;
 - a gradient coil system with a plurality of gradient coils for generating
 - 5 magnetic gradient fields;
 - a local RF coil system for transmitting and/or receiving RF signals,
which coil system includes at least a first RF coil array that has been optimized for the
SENSE method or the SMASH method and a second RF coil array that has been
optimized as a synergy coil array for imaging with a method different from the
 - 10 SENSE or SMASH methods, the first and second coil arrays being integrated in a

single, common coil, each RF coil array comprising at least two RF coils and being decoupled from one another;

- 15 a transmit/receive unit for at least one of driving the RF coil arrays and for receiving MR signals from the RF coil arrays, there being provided a plurality of channels, notably a number of channels which is at least a number of RF coils of the first RF coil array;

a control unit for controlling the MR imaging, the control unit being arranged to switch between the RF coil arrays for temporally separate use of the individual RF coil arrays during MR data acquisition; and

- 20 a processing unit for processing the acquired MR data.

4. (Currently Amended) An MR device as claimed in claim 3, wherein the RF coils of the SENSE RF coil array or the SMASH RF coil array are arranged in the coil former in such a manner that they are situated nearer to the object to be examined than the RF coils of the synergy second coil array.

5. (Currently Amended) An MR device as claimed in claim 3, wherein the SENSE RF coil array or the SMASH RF coil array comprises more and smaller RF coils than the synergy second coil array.

6. (Currently Amended) An MR device as claimed in claim 3, wherein the RF coils of the synergy second coil array are arranged so as to overlap one another and that the RF coils of the SENSE RF coil array or the SMASH RF coil array are arranged so that they do not overlap one another.

7. (Currently Amended) An MR device as claimed in claim 1, wherein all each of the RF coils are is connected to a separate channel of the transmit/receive unit and that the control unit is arranged for the simultaneous acquisition of MR signals by means of RF coils of different RF coil arrays.

8. (Previously Presented) An MR device as claimed in claim 7, wherein there provided means for feeding back MR signals acquired and evaluated in

real time to the control unit so as to change the control of the instantaneous MR data acquisition in conformity with the MR signals acquired and evaluated in real time.

9. (Previously Presented) An MR device as claimed in claim 7, wherein the control unit is arranged to acquire MR signals from a first sub-region of the k space by means of a first RF coil array, notably for the acquisition of MR signals from the central region of the k space by means of a synergy coil array, and to acquire
5 MR signals from a second sub-region of the k space by means of a second RF coil array, notably for the acquisition of MR signals from edge regions of the k space by means of a SENSE RF coil array or a SMASH RF coil array.

10. (Currently Amended) An RF coil system for an MR device as ~~claimed in claim 1~~ for the transmission and/or reception of RF signals for MR imaging, which MR devices includes a main field magnet for generating a steady main magnetic field; a gradient coil system with a plurality of gradient coils for
5 generating magnetic gradient fields; a transmit/receive unit with a plurality of channels for transmitting and receiving MR signals; a control unit for controlling the MR imaging, the control unit being arranged to switch the RF coil arrays for temporally separate use of the individual RF coil arrays during the MR data acquisition; and a processing unit for processing received MR signals, the RF coil
10 system comprising:

at least two RF coil arrays which are integrated in one coil former and have been optimized for different applications, each RF coil array comprising at least two RF coils which are decoupled from one another, the transmit/receive unit being provided with a number of channels which corresponds to the number of RF coils of
15 the RF coil array comprising the largest number of RF coils.

11. (New) The MR device as claimed in claim 1, further including a birdcage coil connected with the transmit/receive unit.

12. (New) The MR device as claimed in claim 11, wherein the birdcage coil is integrated into one coil former with the at least two RF coil arrays.

13. (New) The MR device as claimed in claim 12, wherein a first of the coil arrays is optimized for parallel imaging, notably SENSE or SMASH.

14. (New) The MR device as claimed in claim 13, wherein a second of the RF coil arrays includes a plurality of RF coils which are optimized to receive signals together synergistically.

15. (New) The MR device as claimed in claim 3, further including a birdcage coil connected with the transmit/receive unit.

16. (New) The MR device as claimed in claim 10, wherein a first of the coil arrays is optimized for parallel imaging, such as SENSE or SMASH.

17. (New) The MR device as claimed in claim 10, wherein a second of the RF coil arrays includes a plurality of RF coils which are optimized to receive signals synergistically.